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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/435,803	11/08/1999	MISAO KIMURA	FUJH-16.715	5700

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EXAMINER

LAFORGIA, CHRISTIAN A

ART UNIT	PAPER NUMBER
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2131

DATE MAILED: 07/30/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

PRG

Office Action Summary

Application No.

09/435,803

Applicant(s)

KIMURA, MISAO

Examiner

Christian La Forgia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 November 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1 through 7 are presented for examination.

Drawings

2. The informal drawings filed in this application are acceptable for examination purposes.

When the application is allowed, applicant will be required to submit new formal drawings.

3. The Patent and Trademark Office no longer makes drawing changes. See 1017 O.G. 4.

It is applicant's responsibility to ensure that the drawings are corrected. Corrections must be made in accordance with the instructions below.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

1. **Correction of Informalities -- 37 CFR 1.85**

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

2. **Corrections other than Informalities Noted by Draftsperson on form PTO-948.**

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

Timing of Corrections

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Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.185(a). Failure to take corrective action within the set (or extended) period will result in **ABANDONMENT** of the application.

Specification

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.
5. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.
6. The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.
7. The disclosure is objected to because of the following informalities:
8. There are numerous repeated grammatical and syntax errors throughout the specification.
9. Appropriate correction is required.
10. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

12. Claims 1 through 5 are rejected under 35 U.S.C. 102(e) as being anticipated by United States Patent No. 5,960,086 to Atalla, hereinafter Atalla.

13. As per claim 1, Atalla teaches a network system providing secure communication service facility, comprising:

14. central management and control equipment including an encryption section (Figure 12 [blocks 121, 122, 128b, 129], 15 [block 151], 17c, 17e, 18 [blocks 180, 181, 182]; column 15, lines 29-52); and,

15. a plurality of switching equipment, each including an encryption section (Figures 12, 16 [blocks 162, 164], 17c, 17e, 17f; column 15, lines 29-31; column 17, line 39 to column 18, line 14; column 18, lines 21-40);

16. wherein the encryption section of said central management and control equipment encrypts a public key of switching equipment accommodating a called party, and a common key to encrypt a message for transmission between switching equipment to perform message communication between a calling party and a called party each time a call requesting secure communication is originated, and the central management and control equipment delivers the encrypted public key and common key to switching equipment having detected the originated call (column 15, lines 1-18; column 16, line 46 to column 17, line 7; column 17, line 39 to column 18, line 14). Atalla discusses the hubs being able to generate a session key, which is

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method used to ensure a safe communication over an insecure network, such as the Internet.

17. Regarding claim 2, Atalla teaches:

18. wherein said central management and control equipment has a database maintaining public keys of the plurality of switching equipment, and receives from the switching equipment having detected the call a called dial number and a user identification number assigned in said switching equipment (Figures 14, 16, 17e, 17f, 18 [block 180]; column 16, lines 12-37; column 16, line 46 to column 17, line 7; column 19, line 41 to column 20 line 17),

19. to retrieve in said database the public key of the switching equipment accommodating the called dial number, and a public key of the switching equipment detecting the originated call, using the called dial number and the user identification number (Figure 18; column 19, line 45 to column 20, line 5), and,

20. to generate the common key using the retrieved public keys (Figure 18; column 17, lines 7-30; column 19, line 45 to column 20, line 5).

21. Regarding claim 3, Atalla teaches:

22. wherein said switching equipment having detected the originated call encrypts the common key delivered from the central management and control equipment, using the public key of the switching equipment accommodating the called party, to forward to said switching equipment accommodating the called party (column 17, lines 7-30),

23. thereby said switching equipment accommodating the called party decrypts the encrypted common key received from the switching equipment having detected the originated call, using a

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private key maintained in said switching equipment accommodating the called party (Figure 14; column 16, lines 12-45; column 17, line 40 to column 18, line 18).

24. Regarding claim 4, Atalla teaches:

25. wherein said switching equipment detecting the originated call is controlled so as to transit to the secure communication mode at each time of call origination (Figure 14; column 16, lines 12-45).

26. Regarding claim 5, Atalla teaches:

27. wherein said switching equipment detecting the originated call is controlled so as to transit to the secure communication mode by the detection of indication in said call requesting to transit to the secure communication mode (Figure 14; column 16, lines 12-45).

28. As per claim 6, Atalla teaches a method for delivering an encryption key to enable secure communication facility provided in a network including central management and control equipment and a plurality of switching equipment, each of said equipment having an encryption section, the method comprising the steps of:

29. informing of a called dial number and a user identification number assigned in switching equipment detecting a call from said switching equipment to central management and control equipment (Figures 14, 16, 17e, 17f, 18 [block 180]; column 16, lines 12-37; column 16, line 46 to column 17, line 7; column 19, line 41 to column 20 line 17);

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30. retrieving in a database of the central management and control equipment a public key of switching equipment accommodating a called party using the called dial number (column 20, lines 22-50); and

31. a public key of the switching equipment detecting the call using the user identification number (column 19, line 45 to column 20, line 5);

32. to generate a common key using the retrieved public keys (column 17, lines 7-30; column 19, line 45 to column 20, line 5);

33. encrypting in the switching equipment detecting the call the generated common key using the retrieved public key of the switching equipment accommodating the called party, to forward to said switching equipment accommodating the called party (column 18, lines 52-64; column 19, lines 10-40); and,

34. regenerating the common key in the switching equipment accommodating the called party using a private key of said switching equipment accommodating the called party (column 17, lines 7-30; column 19, line 45 to column 20, line 5).

35. Regarding claim 7, Atalla teaches further comprising the step of:

36. encrypting a called dial number and a user identification number assigned in switching equipment detecting the call using a public key of the central management and control equipment, to transfer from said switching equipment detecting the call to said central management and control equipment (column 19, line 41 to column 20, line 18).

Conclusion

37. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

38. The following patents are cited to further show the state of the art with respect to securing an end-to-end connection using a third party host, such as:

United States Patent No. 5,509,054 to Garland, which is cited to show a communication switching system.

United States Patent No. 5,956,403 to Lipner et al., which is cited to show a method for access field verification.

United States Patent No. 5,351,293 to Michener et al., which is cited to show a method for authenticating an encrypted signal.

United States Patent No. 6,088,449 to Atalla, which is cited to show an tri-signature security architecture.

39. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian La Forgia whose telephone number is (703) 305-7704. The examiner can normally be reached on Monday thru Thursday 7-5.

40. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (703) 305-9648. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7240 for regular communications and (703) 746-7239 for After Final communications.

41. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

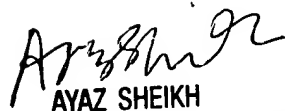
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Christian La Forgia
Patent Examiner
Art Unit 2131

clf
July 25, 2003


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